

SEMIRINGS CLOSE TO REGULAR AND THEIR PIERCE STALKS**R. V. Markov, V. V. Chermnykh**

Received October 30, 2014

We investigate Pierce stalks of semirings and the properties of semirings that grow from properties of the stalks. Objects of study are semirings with nontrivial algebra of idempotents, namely, biregular and Rickart semirings with additional conditions. We obtain characterizations of such semirings in terms of the properties of their Pierce stalks and Pierce sheaves.

Keywords: Rickart semiring, biregular semiring, Pierce stalk, Pierce sheaf of semiring.

R. V. Markov Vyatka State University of Humanities, Kirov, 610002 Russia, e-mail: markovrv@ya.ru.

V. V. Chermnykh Dr. Phys.-Math. Sci., Prof., Vyatka State University of Humanities, Kirov, 610002 Russia, e-mail: vv146@mail.ru.

Cite this article as:

R. V. Markov, V. V. Chermnykh, Semirings close to regular and their Pierce stalks, *Tr. Inst. Mat. Mekh. UrO RAN*, 2015, vol. 21, no. 3, pp. 213–221 .